# Arizona Board of Technical Registration

# PROFESSIONAL LAND SURVEYING CANDIDATE HANDBOOK

# **CONTENTS**

Introduction	. 1
Description of Examination	. 2
Examination Schedule and Timetable	
Examination Validity	
AZLS Test Plan	
Test Development/Review	
Scoring Procedures	
Taking the Examination	3
References	
Special Accommodations	
AZLS Test Plan	4
Sample Questions and Answers	5

### INTRODUCTION

The Arizona Board of Technical Registration (BTR) is responsible for developing the Arizona Land Surveying Examination (AZLS) for candidates seeking licensure as professional land surveyors. The BTR devotes substantial time and effort developing a state-specific examination that is a valid measure of competency related to the practice of the profession. Public protection is enhanced in that competent candidates have a greater chance of passing the examination.

The BTR conducts land surveying test development and validation workshops regularly using the guidelines established in the <u>Technical Standards for Educational and Psychological Testing</u> (1999). All workshops are intended to maximize the fairness and quality of the examinations as measures of minimum competency. The workshops are conducted by experienced testing specialists who possess the type of expertise that is fundamental in developing programs that reflect "state-of-the-art" testing techniques.

The AZLS Examination is a 90 question, **closed-book**, multiple-choice exam and is administered in the BTR office:

1110 West Washington Street, Suite 240 Phoenix, Arizona 85007 Telephone: (602) 364-4930

The examination is the result of careful preparation by a committee comprised of professional land surveyors. These land surveyors supply the content expertise essential in developing a fair and impartial examination for measuring entry level competency in the profession.

In addition, the BTR requires that candidates pass the Fundamentals of Land Surveying (FLS) and the Principles and Practice of Land Surveying (PLS) Examinations prepared by the National Council of Examiners for Engineering and Surveying (NCEES). Candidates may purchase a copy of the NCEES Professional Land Surveying

Candidate Handbook for use in preparing for the FLS and PLS Examinations:

National Council of Examiners for Engineering and Surveying ATTN: Publications Dept. P.O. Box 1686 Clemson, SC 29633-1686

Telephone: 1-(864) 654-6824 ext.233

Fax: 1-(864) 654-6966

Toll Free: 1-800-250-3196 ext. 233 Homepage: <a href="http://www.ncees.org">http://www.ncees.org</a>

This candidate handbook is designed to help you prepare for the AZLS Examination. We hope you find the information useful. We extend our best wishes for success on this examination and in the practice of land surveying.

### DESCRIPTION OF EXAMINATION

### **Examination Schedule and Timetable**

The AZLS Examination is administered in the BTR office. Candidates should contact the BTR and schedule an appointment to take the examination:

1110 West Washington Street, Suite 240 Phoenix, Arizona 85007 Telephone: (602) 364-4930

The examination (total questions = 90) administered in a 3-hour session.

### **Examination Validity**

Testing standards require that the questions on a licensing examination represent the important tasks needed for competent practice in the profession. The relation between the examination questions and the important tasks/activities of a profession is established by conducting a task analysis of the profession. The task analysis is used to determine those tasks performed by the profession related to public protection and the underlying knowledge and skills needed to perform those tasks. This information is then used to develop test blueprints (content outlines) that guide the development of job-related questions that reflect the critical aspect<; of the profession.

The content of the AZLS Examination has been determined by evaluating the results of the NCEES Professional Activities and Knowledge Study and a review of statutes, rules and regulations that impact the practice of professional land surveying in Arizona. The AZLS Examination complements the knowledge and skills measured on the NCEES Examinations. This ensures the examination reflects those competencies related to public protection.

### **AZLS Test Plan**

The AZLS Test Plan (page 4) specifies the content areas/domains for the examination. Each question on the examination is designed to test for knowledge of subject matter within one or more of these content domains. More weight is assigned to

content domains that are most directly related to public protection issues.

### Test Development/Review

The BTR conducts test development and review. workshops regularly. This ensures the questions remain current with changes in the profession. The content, format, and statistical performance of the questions are carefully reviewed to maintain the accuracy of the questions across time. Sample questions for the AZLS Examination are presented on page 5.

The sample questions do not make up a complete examination. However, they do illustrate the general content areas and format and should be helpful in your preparation for the examination.

### **Scoring Procedures**

Scores are calculated by summing the number of correct responses within an examination. Credit is given for correct responses while no points are received for incorrect responses.

All questions are written using a multiple-choice f0n11at. You should select the <u>one best answer</u> for each of the questions in the examination. Credit will <u>not</u> be given for questions with no answer or response <u>or</u> for questions receiving two or more responses. Also, there will be no penalty for guessing, and therefore, it is to your advantage to complete each and every question in the examination.

The cutoff score is determined using a criterion referenced methodology similar to that used by the N CEES for the national examinations. Candidates are not graded on the curve.

### TAKING THE EXAMINATION

### References

The AZLS is a closed-book examination. No references are permitted; however, you may use <u>hand-held</u> calculators. Remember that you have 90 multiple-choice questions to complete within 3 hours. Familiarity with the reference material (see AZLS Test Plan, page 4) should allow sufficient time to complete the examination. Failure to thoroughly learn and review the reference materials will result in insufficient time to complete the 90 item examination within 3 hours.

The examination questions are primarily developed from several references. It is to your advantage to spend time learning and reviewing the relevant material.

1. Arizona Revised Statutes (ARS) located at: <a href="http://www.azleg.state.az.us/">http://www.azleg.state.az.us/</a>

The entire ARS can be accessed, including those statutes listed in the AZLS Test Plan.

2. Manual of Instructions for the Survey of the Public lands of the United States 1973

Located at: <a href="http://www.az.blm.gov/cadastral/manual/manindex.html">http://www.az.blm.gov/cadastral/manual/manindex.html</a>

3. Applicable Statutes and Rules of the State Board of Technical Registration, including the Minimum Standards for Arizona Land Boundary Surveys, located at: <a href="http://v.rww.btr.state.az.us/">http://v.rww.btr.state.az.us/</a>

### **Special Accommodations**

If you require special accommodations in the test-taking procedure because of a disabling condition, communicate your need well before the examination to the:

Arizona Board of Technical Registration 1110 West Washington Street, Suite 240 Phoenix, Arizona 85007

Telephone: (602) 364-4930

### A LAND SURVEYOR TEST PLAN (Total Items = 90)

- 1. Definitions (9-463 and 32-2101)
- 2. Authority (9-463.01)
- 3. Subdivision Defined, Applicability (9-463.02)
- 4. Violations (9-463.03)
- 5. Subdivisions Plats, Projection of Street and Alley lines, Approval, Survey (9-474)
- 6. Subdivision Name, Limitation, Title to Streets (9-477)
- 7. Conveyance by Reference to Plat, Restriction, Violation, Penalty (9-479)
- 8. Size Prerequisites for Recording Maps and Plats (11-481)
- 9. Subdivision Regulation, Platting Rules, Penalty (11-806.01)
- 10. Action to Quiet Title (12-1101)
- 11. Board of Technical Registration (32-101-145)
- 12. Survey of Property, Maps and Plats (32-2194.21)
- 13. Landmarks and Surveys (33-101-106)
- 14. "Old" Arizona Coordinate System (33-121-128)
- 15. "New" Arizona Coordinate System (33-131 through 138)
- 16. Adverse Possession (12-521 through 528)
- 17. Arizona Minimum Standards
- 18. Mining Locations (27-201-209)
- 19. Public Land Survey System

1.

(11-481)

Maps and plats for recording EXCEPT subdivisions shall be on a . sheet or sheets measuring:

- A) eight and one-half by eleven inches.
- B) eleven by seventeen inches.
- C) eighteen by twenty-four inches.
- D) eighteen by twenty-six inches.

2.

(AZ Minimum Standards)

Minimum Standards for Arizona Land Boundary Surveys (Section 1), requires the land surveyor to make a diligent search for pertinent record documents. Copies of applicable deeds, maps, title report or title opinions:

- A) must be obtained when a Record of Survey is to be filed.
- B) should be obtained.
- C) are required if subject property is an aliquot part of the U.S. Public Land System.
- D) are needed to show senior rights.

3.

(Public Land Survey System)

Manuals of instructions were issued in 1881, 1890, 1894, 1902, 1930, 1947 and most recently 1973. You have been retained to retrace an original government survey performed in 1898. As a guide to retracement, you should use:

- A) the most recently published manual of 1973.
- B) the manual of 1894.
- C) the manual of 1881.
- D) accepted local practice as the manual is to be used only by official government surveyors.

(9-474)

Your client has asked you to subdivide a tract of land in an unincorporated area of the county without a planning commission. How close must the subdivision be to the corporate limits of a city or town before you must make them aware of his development?

- A) 1 mile
- B) 3 miles
- C) 4 miles
- D) 5 miles

5.

(9-479)

Every sale of a lot or parcel in an unrecorded subdivision:

- A) must be recorded in Records of Survey.
- B) must be surveyed by a Registered Land Surveyor.
- C) must be approved by the local governing body.
- D) constitutes a separate violation of state law.

## **Keyfor AZLS Sample Questions**

- 1. C
- 2. B
- 3. B
- 4. B
- 5. D